

Econ 438 Final Paper Presentation

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Idea

- ▶ Broadband roll-out in Denmark
- ▶ Exogenous subsidy program
- ▶ Firm outcomes

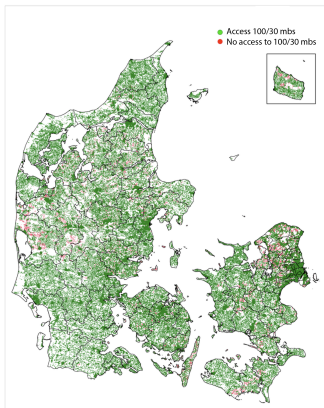


Figure 1: Broadband in Denmark 2023

Data

- ▶ Address-level broadband data
- ▶ Firm-level financial data
- ▶ 3,756 treatment addresses.
- ▶ 36,801 control addresses
- ▶ 49,869 financial statements 2014-2021

Summary Statistics: Profit/Loss Log

group	count	mean	std	min	25%	50%	75%	max
control	46248.0	7.91	6.53	0.0	0.0	10.88	13.42	22.80
treated	3621.0	7.28	6.09	0.0	0.0	10.31	12.50	19.06

Table 1: Summary statistics for *profit_loss_log*.

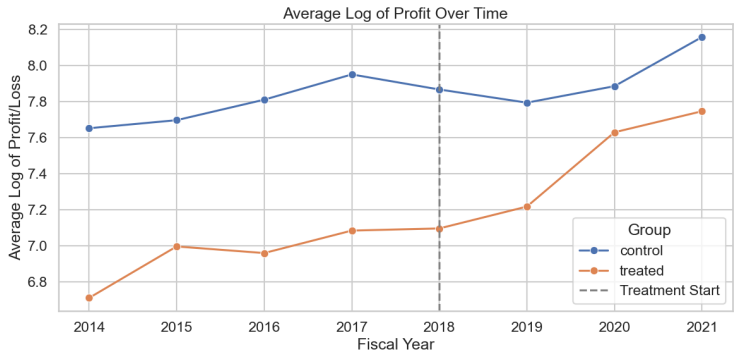


Figure 2: Difference-in-Difference

OLS Regression Results

Variable	Coefficient	Std. Error	t-Statistic	P-Value
Intercept	7.8032	0.039	200.201	0.000
Treatment (Treated)	-0.8397	0.145	-5.776	0.000
Post Treatment	0.2610	0.062	4.235	0.000
Treated \times Post	0.5293	0.228	2.320	0.020

Statistic	Value
R-squared	0.001
F-statistic	20.59
Number of Observations	49,869
Degrees of Freedom (Model)	3

Table 2: OLS regression results for *profit_loss_log*.

Summary of Results

- ▶ Control group has a higher mean log profit/loss compared to the treatment group.
- ▶ Significant effect of treatment and interaction terms in regression:
 - ▶ Treatment effect (*Treatment*): -0.8397, significant at $p < 0.001$.
 - ▶ Post-treatment effect (*Post Treatment*): 0.2610, significant at $p < 0.001$.
 - ▶ Interaction term (*Treated* \times *Post*): 0.5293, significant at $p < 0.05$.